

ABSTRACT OF THE DISCLOSURE

In a semiconductor device comprising a cylindrical storage node, the surface area of the storage node is increased by forming silicone grains in an amorphous 5 silicone film by a heat treatment only to an outer wall of the cylindrical portion to thereby form a roughened surface in the outer wall, and the amorphous silicone film is left in an inner wall without conducting a surface roughening treatment to the inner wall whereby 10 the physical strength of the cylindrical portion is maintained and the destruction and the breakage of the cylindrical portion are prevented.